

REMARKS

Claims 1 and 3 remain pending in the present application. Claims 1 and 3 have been amended, and Claims 2 and 4 have been cancelled. Basis for the amendments can be found throughout the specification, claims and drawings originally filed.

SPECIFICATION

Applicants have amended the specification to correct typographical errors.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art (Figs. 6 and 7). While Claims 2 and 4 have been cancelled, this rejection is respectfully traversed as to Claims 1 and 3.

Claim 1 recites multiplying one of the first power information and the second average signals by a factor, and then adding the result to the other.

As shown in Fig. 3, the probability of detection success of the Fig. 7 correlator is higher than the Fig. 6 correlator in the region that the frequency difference is very small and far lower in the region that the frequency difference is large. To provide an improved probability over a wide range of frequency difference, it would be possible to selectively use the Fig. 7 correlator and the Fig. 6 correlator in the range where the frequency difference is small and large, respectively. This system would necessitate use of a frequency difference detection circuit, a correlator selection circuit, a correlator switching timing determination circuit, etc.

The present invention, as claimed, provides a different solution. That is, both outputs of Fig. 6 and Fig. 7 correlators are continuously added by an adder 110, and additionally one of the two outputs is multiplied by a factor before being added. As a result, no selection circuit nor timing determination circuit, etc. is needed, and the two outputs can be balanced in proper weights. This is not obvious over the Fig. 6 and Fig. 7 correlators. Neither Fig. 6 nor Fig. 7 teaches or suggests this approach.

Thus, Applicants believe Claim 1, as amended, patentably distinguishes over the art of record. Claim 3 is in condition for allowance for at least reasons similar to Claim 1.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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